

ALABAMA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

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Alabama Power Company)	Order No. XX- XXX-GW
William C. Gorgas Electric Generating Plant)	
460 Gorgas Road)	
Parish, Walker County, Alabama)	
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FINDINGS

Pursuant to the provisions of the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended; the Alabama Water Pollution Control Act (hereinafter “AWPCA”), Ala. Code §§ 22-22-1 to 22-22-14, as amended; and the ADEM Administrative Code of Regulations (hereinafter ADEM Admin. Code) promulgated pursuant thereto, the Alabama Department of Environmental Management (hereinafter “ADEM” or “the Department”) makes the following Findings:

1. Alabama Power Company (hereinafter “the Owner”) is the owner and operator of William C. Gorgas Electric Generating Plant (hereinafter “the Facility”) located at 460 Gorgas Road, Parish, Alabama, 35580, which is the subject of this administrative order.
2. The Department is a duly constituted department of the State of Alabama pursuant to Ala. Code §§ 22-22A-1 to 22-22A-17, as amended.
3. Pursuant to Ala. Code § 22-22A-4(n), as amended, the Department is the state agency responsible for the promulgation and enforcement of water pollution control regulations in accordance with the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 to 1388. In addition, the Department is authorized to administer and enforce the provisions of the AWPCA and the regulations promulgated pursuant thereto.

4. Ala. Code § 22-22-9(i)(3) prohibits the discharge of any pollution into waters of the State without a permit. “Waters of the State” include groundwater pursuant to Ala. Code § 22-22-1(b)(2) and ADEM Admin. Code r. 335-6-8-.02(cccc).

5. ADEM Admin. Code r. 335-6-8-.05 prohibits the unpermitted discharge of fluids and/or pollutants to groundwater and/or soils, which may result in a discharge of fluids and/or pollutants to groundwater.

6. The 2017 Annual Groundwater Monitoring and Corrective Action Report (hereinafter “Report”) submitted to the Department by the Owner, indicates that the Owner has caused or allowed the unpermitted discharge of pollutants associated with ash pond wastewater from the Plant Gorgas Ash Pond to waters of the State. The Report indicates detections above a promulgated maximum contaminant level (hereinafter “MCL”) in groundwater during groundwater monitoring events performed by the Owner. Furthermore, the Report identified exceedances of promulgated primary MCLs as detailed in Appendix A. The Owner’s data indicates an ongoing violation of the AWPCA and the ADEM Admin. Code.

7. The Report submitted to the Department by the Owner, indicates that the Owner has caused or allowed the unpermitted discharge of pollutants associated with gypsum pond wastewater from the Plant Gorgas Gypsum Pond to waters of the State. The Report indicates detections above a promulgated MCL in groundwater during groundwater monitoring events performed by the Owner. Furthermore, the Report identified exceedances of promulgated primary MCLs as detailed in Appendix B. The Owner’s data indicates an ongoing violation of the AWPCA and the ADEM Admin. Code.

8. The Report submitted to the Department by the Owner, indicates that the Owner has caused or allowed the unpermitted discharge of pollutants associated with coal combustion residual (CCR) landfill wastewater from the Plant Gorgas CCR Landfill to waters of the State. The Report indicates detections above a promulgated MCL in groundwater during groundwater monitoring events performed by the Owner. Furthermore, the Report

identified exceedances of promulgated primary MCLs as detailed in Appendix C. The Owner's data indicates an ongoing violation of the AWPCA and the ADEM Admin. Code.

9. The Report submitted to the Department by the Owner, indicates that the Owner has caused or allowed the unpermitted discharge of pollutants associated with gypsum landfill wastewater from the Plant Gorgas Gypsum Landfill to waters of the State. The Report indicates detections above a promulgated MCL in groundwater during groundwater monitoring events performed by the Owner. Furthermore, the Report identified exceedances of promulgated primary MCLs as detailed in Appendix D. The Owner's data indicates an ongoing violation of the AWPCA and the ADEM Admin. Code.

10. The Report submitted to the Department by the Owner, indicates that the Owner has caused or allowed the unpermitted discharge of pollutants associated with bottom ash landfill wastewater from the Plant Gorgas Bottom Ash Landfill to waters of the State. The Report indicates detections above a promulgated MCL in groundwater during groundwater monitoring events performed by the Owner. Furthermore, the Report identified exceedances of promulgated primary MCLs as detailed in Appendix E. The Owner's data indicates an ongoing violation of the AWPCA and the ADEM Admin. Code.

11. Ala. Code § 22-22-9(i)(1) authorizes the Department to issue orders prohibiting or abating discharges of pollutants into waters of the State. It is the intention of the Department through this Order to require measures that will address the discharges of pollutants to waters of the State that are the subject of this Order.

12. Pursuant to Ala. Code § 22-22A-5(18)c., as amended, in determining the amount of any penalty, the Department must give consideration to the seriousness of the violation, including any irreparable harm to the environment and any threat to the health or safety of the public; the standard of care manifested by such person; the economic benefit which delayed compliance may confer upon such person; the nature, extent and degree of success of such person's efforts to minimize or mitigate the effects of such violation upon

the environment; such person's history of previous violations; and the ability of such person to pay such penalty. Any civil penalty assessed pursuant to this authority shall not exceed \$25,000.00 for each violation, provided however, that the total penalty assessed in an order issued by the Department shall not exceed \$250,000.00. Each day such violation continues shall constitute a separate violation. In arriving at this civil penalty, the Department has considered the following:

A. SERIOUSNESS OF THE VIOLATIONS: The Department noted unpermitted discharges of fluids and/or pollutants to groundwater and/or soils. In particular, exceedances of promulgated primary MCLs, as indicated in the Appendices, have been identified. The Department has considered the general nature of the violations, the magnitude and duration of the violations, the characteristic of each pollutant discharged and any available evidence of irreparable harm to the environment.

B. THE STANDARD OF CARE: The Department has considered the standard of care manifested in light of the continuing violations noted herein.

C. ECONOMIC BENEFIT WHICH DELAYED COMPLIANCE MAY HAVE CONFERRED: The Department has considered the economic benefit which delayed compliance may have conferred upon the Owner in light of the continuing violations noted herein.

D. EFFORTS TO MINIMIZE OR MITIGATE THE EFFECTS OF THE VIOLATIONS UPON THE ENVIRONMENT: The Department is unaware of any efforts employed by the Owner to minimize or mitigate any effects upon the environment.

E. HISTORY OF PREVIOUS VIOLATIONS: The Owner does not have a history of previous violations.

F. THE ABILITY TO PAY: The Owner has not alleged an inability to pay the civil penalty.

ORDER

Based on the foregoing findings and pursuant to Ala. Code, §§ 22-22A-5(1), 22-22A-5(10), 22-22A-5(18) and 22-22-9, as amended, it is hereby ordered:

A. Not later than **45 days** after issuance of this Order, the Owner shall pay to the Department a civil penalty in the amount of \$250,000.00 for the violations cited herein. Said penalty shall be made payable to the Alabama Department of Environmental Management by certified check or cashier's check and shall be remitted to:

Office of General Counsel
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

All checks shall reference the Owner's name and address and the ADEM Administrative Order number of this action.

B. Not later than **90 days** after the issuance of this Order, the Owner shall submit to the Department a Facility plan and schedule for implementation of a comprehensive groundwater investigation, prepared by a professional geologist or professional engineer licensed to practice in the State of Alabama to thoroughly characterize the nature and extent of the contamination and any relevant site conditions that may affect the remedy selected. This plan shall include the following elements, or an explanation of why a particular element is not warranted, at a minimum: the installation of additional monitoring wells as necessary to define the contaminant plume; the collection of data on the nature and estimated quantity of material released; the installation of at least one additional monitoring well at the Facility boundary in the direction of contaminant migration; and the establishment of an assessment groundwater monitoring program, which shall include sampling and analysis for all 40 CFR Part 257 Appendix III and IV parameters. The plan shall also include a schedule by which the Owner will notify all persons who own land or reside on land that directly overlies any part of the plume of contamination. As part of the

plan, the Owner may undertake a demonstration that a source other than the CCR unit caused the contamination. Upon submittal, the Owner shall implement the plan and submit a complete Groundwater Investigation Report within **270 days** from the issuance of this Order.

C. Not later than **330 days** from the issuance of this Order, the Owner shall submit an Assessment of Corrective Measures (hereinafter the “ACM”) to the Department for approval. The ACM shall include the identification and analysis of the short-term and long-term effectiveness of potential remedies addressing at least the following:

1. The performance, reliability, ease of implementation, and potential impacts of appropriate options for potential remedies;
2. A schedule of implementation, including an estimate on the time required to complete each potential remedy; and
3. A list of institutional requirements that may affect the implementation of each potential remedy.

The ACM shall include the remedy proposed to the Department for approval. Remedies must control the source of the release and attain the established groundwater protection standard or applicable promulgated MCL. During the implementation of the approved remedy and continuing until the concentration of each constituent detected in exceedance of a promulgated MCL or established groundwater protection standard has returned to a level at or below background levels, the Owner shall continue the assessment groundwater monitoring program to demonstrate the effectiveness of the remedy, as directed by the Department. Should the ACM propose pond closure, a dewatering plan, which shall be prepared by a professional engineer licensed to practice in the State of Alabama, shall be submitted to the Department’s Water Division no later than the due date of the ACM. If the Department determines through its review that the submitted ACM, or dewatering plan, is not sufficient to accomplish compliance with applicable Federal and State laws or

regulations, and with ADEM-issued permits, then a revised ACM, or dewatering plan, shall be submitted to the Department no later than **30 days** after receipt of the Department's comments. Within **90 days** of Departmental approval of a proposed remedy, the Owner shall initiate remedial activities. The Owner shall make any changes or additions to the selected remedy, as required by the Department.

D. Not later than **120 days** after the issuance of this Order, the Owner shall submit to the Department for approval an Investigative Report evaluating any deficiencies at the Facility that may have led to the unpermitted discharge of pollutants into the groundwater. The Investigative Report shall be certified by a qualified professional engineer licensed to practice in the State of Alabama. The Investigative Report shall include a structural integrity assessment for the Ash Pond, Gypsum Pond, CCR Landfill, Gypsum Landfill, and the Bottom Ash Landfill at the Facility. The Investigative Report shall be accompanied by an evaluation of the need for revising the Facility's operations and maintenance procedures to address any deficiencies of the kind which led to the violations alleged in this Order. The Investigative Report shall include a detailed discussion of any deficiencies noted, recommended actions to address any noted deficiencies, as well as a schedule for implementation of recommended actions. If the Department determines through its review of the submitted Investigative Report, that the Report is not sufficient to accomplish compliance with applicable Federal and State laws or regulations, and with ADEM-issued permits, then the Owner shall submit a revised Investigative Report to the Department no later than **30 days** after receipt of the Department's comments. The Owner shall complete implementation of the recommendations made in the Investigative Report pursuant to the schedule set forth in the approved Investigative Report.

E. The Owner shall submit to the Department semi-annual progress reports for the Facility beginning the first quarter after the submittal of the comprehensive groundwater monitoring plan and continuing thereafter until released in writing by the Department. The

Owner shall continue implementation of required remedial actions until released in writing by the Department.

F. If required by the Department, the Owner shall undertake further assessment, monitoring, reporting, and/or abatement activities as directed by the Department, and shall continue such required actions until released in writing by the Department.

G. The issuance of this Order shall not affect the Owner's obligation to comply with applicable Federal, State, or local laws or regulations.

H. Failure to comply with the provisions of this Order shall constitute cause for commencement of legal action by the Department against the Owner for recovery of additional civil penalties, criminal fines, or other appropriate sanctions or relief.

I. Should any provision of this Order be declared by a court of competent jurisdiction or the Environmental Management Commission to be inconsistent with Federal or State law and, therefore, unenforceable, the remaining provisions hereof shall remain in full force and effect.

ORDERED and ISSUED this _____ day of _____, 2018.

Lance R. LeFleur
Director

APPENDIX A

Plant Gorgas Ash Pond Primary MCL Exceedances Monitoring Period (August 2016 – June 2017)

Monitoring Well	Sample Date	Analyte	Result (mg/L)	MCL (mg/L)
MW-6D	8/3/16	Arsenic	0.0547	0.01
MW-6D	9/20/16	Arsenic	0.0625	0.01
MW-6D	10/24/16	Arsenic	0.0695	0.01
MW-6D	12/12/16	Arsenic	0.0611	0.01
MW-6D	2/6/17	Arsenic	0.0618	0.01
MW-6D	3/27/17	Arsenic	0.0711	0.01
MW-6D	4/24/17	Arsenic	0.0787	0.01
MW-6D	6/6/17	Arsenic	0.0778	0.01
MW-6	8/3/16	Arsenic	0.0103	0.01
MW-6	9/20/16	Arsenic	0.0103	0.01
MW-6	10/26/16	Arsenic	0.0115	0.01
MW-6	12/12/16	Arsenic	0.0106	0.01
MW-6	2/6/17	Arsenic	0.0106	0.01
MW-6	6/6/17	Arsenic	0.0105	0.01
MW-7	8/2/16	Arsenic	0.188	0.01
MW-7	9/21/16	Arsenic	0.179	0.01
MW-7	10/24/16	Arsenic	0.151	0.01
MW-7	12/12/16	Arsenic	0.181	0.01
MW-7	2/6/17	Arsenic	0.194	0.01
MW-7	3/28/17	Arsenic	0.205	0.01
MW-7	4/24/17	Arsenic	0.202	0.01
MW-7	6/7/17	Arsenic	0.193	0.01
MW-12	8/3/16	Arsenic	0.11	0.01
MW-12	9/20/16	Arsenic	0.0746	0.01
MW-12	10/25/16	Arsenic	0.0728	0.01
MW-12	12/13/16	Arsenic	0.0538	0.01
MW-12	2/8/17	Arsenic	0.0427	0.01
MW-12	3/29/17	Arsenic	0.0404	0.01
MW-12	4/26/17	Arsenic	0.0372	0.01
MW-12	6/7/17	Arsenic	0.0307	0.01
MW-15	8/1/16	Arsenic	0.015	0.01
MW-15	9/20/16	Arsenic	0.0111	0.01
MW-15	10/25/16	Arsenic	0.0109	0.01
MW-15	12/14/16	Arsenic	0.011	0.01
MW-18	8/2/16	Arsenic	0.0505	0.01
MW-18	9/21/16	Arsenic	0.0527	0.01
MW-18	10/24/16	Arsenic	0.0597	0.01
MW-18	12/12/16	Arsenic	0.0659	0.01
MW-18	2/8/17	Arsenic	0.0669	0.01
MW-18	3/28/17	Arsenic	0.0668	0.01
MW-18	4/26/17	Arsenic	0.0722	0.01
MW-18	6/6/17	Arsenic	0.0673	0.01

APPENDIX B

Plant Gorgas Gypsum Pond
Primary MCL Exceedances
Monitoring Period (August 2016 – May 2017)

Monitoring Well	Sample Date	Analyte	Result (mg/L)	MCL (mg/L)
MW-3	10/26/16	Beryllium	0.0071	0.004
MW-3	11/21/16	Beryllium	0.00689	0.004
MW-3	1/18/17	Beryllium	0.0169	0.004
MW-3	3/22/17	Beryllium	0.00686	0.004
MW-3	4/17/17	Beryllium	0.00655	0.004
MW-3	5/31/17	Beryllium	0.00547	0.004
MW-4	8/24/16	Beryllium	0.00576	0.004
MW-4	10/3/16	Beryllium	0.00469	0.004
MW-4	10/26/16	Beryllium	0.00459	0.004
MW-4	11/21/16	Beryllium	0.00502	0.004
MW-4	1/17/17	Beryllium	0.00488	0.004
MW-4	3/21/17	Beryllium	0.00521	0.004
MW-4	4/17/17	Beryllium	0.0058	0.004
MW-4	5/30/17	Beryllium	0.00517	0.004

APPENDIX C

Plant Gorgas CCR Landfill
Primary MCL Exceedances
Monitoring Period (April 2016)

Monitoring Well	Sample Date	Analyte	Result (mg/L)	MCL (mg/L)
MW-3	4/25/16	Cadmium	0.0121	0.005

APPENDIX D

Plant Gorgas Gypsum Landfill
Primary MCL Exceedances
Monitoring Period (April 2016)

Monitoring Well	Sample Date	Analyte	Result (mg/L)	MCL (mg/L)
MW-3	4/25/16	Cadmium	0.0121	0.005
MW-12	4/28/16	Arsenic	0.0444	0.01

APPENDIX E

Plant Gorgas Bottom Ash Landfill Primary MCL Exceedances Monitoring Period (April 2016-May 2017)

Monitoring Well	Sample Date	Analyte	Result (mg/L)	MCL (mg/L)
MW-3	4/25/16	Cadmium	0.0121	0.005
MW-3	11/21/16	Beryllium	0.00689	0.004
MW-3	1/18/17	Beryllium	0.0169	0.004
MW-3	3/22/17	Beryllium	0.00686	0.004
MW-3	5/31/17	Beryllium	0.00547	0.004
MW-12	4/28/16	Arsenic	.0444	0.01
MW-12	8/10/16	Arsenic	0.0416	0.01
MW-12	10/5/16	Arsenic	0.0431	0.01
MW-12	11/22/16	Arsenic	0.0487	0.01
MW-12	1/18/17	Arsenic	0.0428	0.01
MW-12	3/21/17	Arsenic	0.0418	0.01
MW-12	5/31/17	Arsenic	0.0466	0.01
MW-10	4/27/16	Beryllium	0.00486	0.004